

IN THE SUPREME COURT OF THE STATE OF NEVADA

TAMARA HOLCOMB; BILLY JOE
HOLCOMB; JOSEPH HOLCOMB;
SHELLY HOLCOMB; AND KELLY
MILLER,
Appellants,

vs.

GEORGIA PACIFIC, LLC; KAISER
GYPSUM COMPANY, INC.; KELLY-
MOORE PAINT COMPANY, INC.; AND
UNION CARBIDE CORPORATION,
Respondents.

No. 56510

FILED

DEC 06 2012

TRACIE LINDSEY
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Appeal from a district court summary judgment, certified as final under NRCP 54(b), in a torts action. Eighth Judicial District Court, Clark County; Douglas W. Herndon, Judge.

Affirmed in part, reversed in part, and remanded.

Hutchison & Steffen, LLC, and Michael K. Wall, Las Vegas; Waters, Kraus & Paul and Paul C. Cook, El Segundo, California, for Appellants.

Troy E. Peyton, P.C., and Troy E. Peyton, Las Vegas; Baker & Hostetler, LLP, and Mary Price Birk, Denver, Colorado, for Respondent Union Carbide Corporation.

Lewis & Roca, LLP, and Daniel F. Polsenberg, Las Vegas, for Respondents Georgia Pacific, LLC; Kaiser Gypsum Company, Inc.; and Kelly-Moore Paint Company, Inc.

BEFORE THE COURT EN BANC.

OPINION

By the Court, CHERRY, C.J.:

In this appeal, we examine the causation tests that courts have implemented when a plaintiff's or decedent's mesothelioma is alleged to have been caused by exposure to a defendant's asbestos-containing products. We take a balanced approach to find a causation test that is not overly rigorous or too relaxed in order to ensure protection for both manufacturers and consumers. Ultimately, we agree with the majority view and adopt the test set forth in Lohrmann v. Pittsburgh Corning Corp., 782 F.2d 1156 (4th Cir. 1986), as that test is explained in Gregg v. V-J Auto Parts, Inc., 943 A.2d 216, 225 (Pa. 2007), for mesothelioma cases. Under the Lohrmann test, the plaintiff is required to prove exposure to the defendant's product "on a regular basis over some extended period of time" and "in proximity to where the plaintiff actually worked," such that it is probable, or reasonable to infer, that the exposure caused the mesothelioma. Lohrmann, 782 F.2d at 1162-63.

In light of that standard, we then determine whether appellants submitted sufficient causation evidence to raise triable issues of material fact regarding whether, in this case, the decedent's mesothelioma was probably caused by the respondents' products. In doing so, we conclude that appellants presented sufficient evidence to defeat summary judgment as to respondents Kelly-Moore Paint Company, Inc.; Kaiser Gypsum Company, Inc.; and Georgia Pacific, LLC, but not as to respondent Union Carbide Corporation. Accordingly, we affirm the

summary judgment in Union Carbide's favor but reverse the summary judgment as to the remaining respondents.

FACTS AND PROCEDURAL HISTORY

This case arises out of Randy Holcomb's (Holcomb) contraction of and resulting death from mesothelioma, a cancer affecting the lining of the lungs, typically caused by exposure to asbestos. Before Holcomb died in 2008, he and his wife, appellant Tamara Holcomb, filed a complaint against joint-compound manufacturers Bondex International, Inc., and related companies;¹ Kelly-Moore; Kaiser Gypsum; and Georgia Pacific, asbestos supplier Union Carbide,² and various automotive brake product manufacturers, distributors, and sellers. They alleged that Holcomb's mesothelioma was caused by exposure to asbestos contained in those parties' products, which Holcomb used for several years while working as a construction laborer and as an automotive mechanic. The personal injury complaint sounded in negligence and strict products liability, and it included a claim for loss of consortium. After Holcomb died in December 2008, the complaint was amended to include a wrongful death claim by Tamara Holcomb, individually and as the representative of Randy Holcomb's estate, and by their children, appellants Billy Joe Holcomb, Joseph Holcomb, Shelly Holcomb, and Kelly Miller.

¹Bondex and its related companies were dismissed from this appeal pursuant to an automatic bankruptcy stay.

²Kelly-Moore, Kaiser Gypsum, and Georgia Pacific are manufacturers of asbestos-containing products, while Union Carbide supplied and sold the asbestos to these manufacturers.

Holcomb's use of asbestos-containing products

According to Holcomb's deposition testimony, he worked in the construction industry in Florida from 1969 through 1973, performing sheetrock and drywall work using both dry joint-compound powder packaged in paper bags, which had to be mixed with water prior to use, and pre-mixed joint compound packaged in buckets. According to Holcomb, the application of these joint-compound products created multiple occurrences of dusty, asbestos-laden conditions at each job site. After a year of military service, Holcomb moved to Las Vegas around 1975, where he resumed construction and sheetrock work for several years, first for a motel and later on construction sites. For the construction work in both Florida and Nevada, Holcomb recalled that he used Bondex, Paco, and Paco Quik-Set (manufactured by Kelly-Moore), Kaiser Gypsum, and Georgia Pacific brands of joint compound. He recalled using these brands within the first three years of moving to Las Vegas. Although Holcomb remembered using the identified joint-compound product brands while in Florida and Nevada, he did not recall using any particular product on any particular job or at any particular time, and he could not identify in concrete terms how often his construction duties encompassed sheetrock and drywall work. However, he had specific memories of using all of the named product brands on a regular basis.

Additionally, beginning in 1969 when he moved to Florida and regularly thereafter, Holcomb worked as a brake mechanic in the automotive industry, often performing these jobs on the side, in addition to his other work. The brake jobs allegedly required scuffing, beveling, and filing the edges of asbestos-containing brakes, creating dusty conditions in

which he breathed. Holcomb asserted that these repeated exposures to the brake and joint-compound products caused his mesothelioma later in life.

Causation evidence

Appellants presented testimony and a letter from pathologist Dr. Ronald Gordon, Ph.D., in which he concluded after examining Holcomb's lung tissue that Holcomb's mesothelioma was attributable to asbestos. Dr. Gordon found "significant asbestos fiber burden" present in the lung tissue that "was the causative factor in the development of his mesothelioma."

In addition, appellants submitted the report and deposition testimony of Dr. Edwin Holstein, M.D., M.S., who provided expert opinion regarding the medical cause of Holcomb's mesothelioma.³ Dr. Holstein's report explained that Holcomb's work with asbestos-containing joint compounds and brake components caused asbestos to be released into the air, which Holcomb then breathed in. Dr. Holstein stated that Holcomb's resulting exposures to joint-compound and automotive-friction products acted cumulatively to cause his mesothelioma. He opined that "each and every exposure to asbestos increases the total exposure and that the

³Respondents Kelly-Moore, Kaiser Gypsum, and Georgia Pacific object to Holcomb's use of Dr. Holstein's expert report, asserting that it would have been inadmissible at trial and therefore could not be considered by the district court. However, as the report was provided to the district court and this issue was not raised below, it will not be considered on appeal. See Diamond Enters., Inc. v. Lau, 113 Nev. 1376, 1378, 951 P.2d 73, 74 (1997) (stating that "[i]t is well established that arguments raised for the first time on appeal need not be considered by this court").

progressively increasing cumulative exposure increases the risk of developing an asbestos-related disease, including mesothelioma.” He further opined that “the best scientific evidence is that all significant exposures contribute to the causation of a subsequent mesothelioma.” Dr. Holstein explained that “joint compounds and brakes, when worked with in the ordinary and customary ways, regularly gave rise to significant amounts of asbestos dust in the air,” and that the types of asbestos fibers used in joint compound and brakes cause mesothelioma. Dr. Holstein summarized his causation opinions by stating that Holcomb’s mesothelioma was caused by exposure to asbestos in joint-compound and automotive-friction products.

Procedural posture

The joint-compound and automotive-brake defendants separately moved for summary judgment on the ground that Holcomb’s deposition testimony was too vague to raise triable issues of fact regarding his threshold exposure to any asbestos contained in their products. The district court granted summary judgment to the joint-compound defendants, concluding that appellants had failed to submit sufficient evidence of exposure to allow a jury to find that those defendants’ products were substantial factors in causing Holcomb’s mesothelioma. The district court pointed out that Holcomb could not definitively describe when or how regularly and frequently he used each defendant’s products, did not identify products but only manufacturers, and could not identify whether the products that he used contained asbestos. The court largely denied summary judgment to the automotive-brake defendants, concluding that appellants had submitted sufficient evidence of exposure to asbestos in the brake products to take the case to a jury.

In resolving the summary judgment motions, the district court considered caselaw from a host of jurisdictions, including a Fourth Circuit Court of Appeals opinion, Lohrmann v. Pittsburgh Corning Corp., 782 F.2d 1156 (4th Cir. 1986), and a California Supreme Court decision, Rutherford v. Owens-Illinois, Inc., 941 P.2d 1203 (Cal. 1997). Ultimately, with regard to the joint-compound defendants, the district court determined that under any standard, Holcomb had not provided enough information regarding his use of asbestos-containing joint compound to proceed with the claims. The district court subsequently certified its orders granting summary judgment to the joint-compound defendants as final, pursuant to NRCP 54(b), and appellants appealed.⁴

DISCUSSION

This court reviews a district court's order granting summary judgment de novo, without deference to the findings of the lower court. Francis v. Wynn Las Vegas, 127 Nev. ___, ___, 262 P.3d 705, 714 (2011). Summary judgment is proper only when "the pleadings, depositions, answers to interrogatories, and admissions on file, together with the affidavits, if any, show that there is no genuine issue as to any material fact and that the moving party is entitled to a judgment as a matter of law." NRCP 56(c). "A factual dispute is genuine when the evidence is such that a rational trier of fact could return a verdict for the nonmoving party." Wood v. Safeway, Inc., 121 Nev. 724, 731, 121 P.3d 1026, 1031 (2005). When deciding a summary judgment motion, all evidence must be

⁴Trial as to the automotive-brake defendants was stayed pending the outcome of this appeal.

viewed in a light most favorable to the nonmoving party. Id. at 729, 1026 P.3d at 1031.

Here, appellants argue that the district court erred in granting summary judgment on the basis that Holcomb could not specify regular and frequent exposure to any particular product containing asbestos sufficient to demonstrate that the product was a substantial factor in causing his mesothelioma. They assert that respondents sought summary judgment based solely on Holcomb's alleged failure to establish a threshold amount of exposure. Because appellants' expert opined that even low exposures are sufficient to cause mesothelioma, appellants contend that they established a threshold amount of exposure by averring that Holcomb was exposed to asbestos in respondents' products, and they therefore presented a triable issue of material fact. Respondents contend that the district court properly granted summary judgment because appellants were not able to demonstrate a minimum level of exposure to asbestos in any particular joint-compound product.

The causation standard in asbestos-induced mesothelioma cases

Regardless of the cause of action, causation—encompassing both medical causation and sufficient exposure—is a necessary element in proving appellants' case.⁵ See Klasch v. Walgreen Co., 127 Nev. ___, ___,

⁵See David E. Bernstein, Getting to Causation in Toxic Tort Cases, 74 Brook. L. Rev. 51, 51 (2008) (“[T]o prove causation in a toxic tort case, a plaintiff must show that the substance in question is capable, in general, of causing the injury alleged, and also that exposure to the substance more likely than not caused his injury.” (emphasis omitted)); Anthony Z. Roisman, Martha L. Judy & Daniel Stein, Preserving Justice: Defending Toxic Tort Litigation, 15 Fordham Envtl. L. Rev. 191, 202 (2004) (“Irrespective of the nature of the cause of action alleged, at root all toxic tort cases require the same basic evidence. A toxic substance must be

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264 P.3d 1155, 1158 (2011) (plaintiff bears burden to establish causation as an element of negligence); Rivera v. Philip Morris, Inc., 125 Nev. 185, 191, 209 P.3d 271, 275 (2009) (plaintiff bears burden to prove causation in products liability cases); Rutherford v. Owens-Illinois, Inc., 941 P.2d 1203, 1214 (Cal. 1997) (“Most asbestos personal injury actions are tried on a products liability theory.”). Holcomb alleged asbestos exposure from multiple sources. While medical causation is not at issue here, appellants must demonstrate that a particular defendant sufficiently exposed Holcomb to asbestos in order to establish adequate causation to hold that defendant liable. Thus, we necessarily consider the exposure causation standard by which these types of cases will be evaluated in Nevada.

Given the often lengthy latency period between exposure and manifestation of injury, poor record keeping, and the expense of reconstructing such data, plaintiffs in asbestos litigation typically are “unable to prove with any precision how much exposure they received from any particular defendant’s products.” David E. Bernstein, Getting to Causation in Toxic Tort Cases, 74 Brook. L. Rev. 51, 55 (2008); see Anthony Z. Roisman, Martha L. Judy & Daniel Stein, Preserving Justice: Defending Toxic Tort Litigation, 15 Fordham Envtl. L. Rev. 191, 203 (2004). To remedy this situation, which could unfairly deny deserving plaintiffs in asbestos cases any recovery, courts have fashioned a variety of

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released from some product or property, the plaintiff and/or his property must be exposed to the toxic substance in some way, and that exposure must be a substantial cause of a present injury which plaintiff has suffered for which damages are recoverable. Of all these elements the two which have proven the most troublesome are exposure and causation.”).

causation standards in an attempt to balance the interests of plaintiffs with the interests of nonresponsible defendants. Bernstein, supra, at 51. Beginning with Borel v. Fibreboard Paper Products Corporation, 493 F.2d 1076 (5th Cir. 1973), the first successful asbestos case, courts have struggled to evaluate causation in a manner to best process asbestos claims, especially those that allege “uncertain, modest, or very small” exposure. Joseph Sanders, Michael D. Green & William C. Powers, Jr., The Insubstantiality of the “Substantial Factor” Test for Causation, 73 Mo. L. Rev. 399, 402 (2008). As a result, “the precise requirements of proof of causation vary from state to state.” James L. Stengel, The Asbestos End-Game, 62 N.Y.U. Ann. Surv. Am. L. 223, 237 (2006).

Nevada has not articulated any particular causation standard in asbestos cases for determining whether a plaintiff’s or decedent’s mesothelioma is sufficiently caused by exposure to a defendant’s products. Therefore, we consider the causation standards used in three preeminent asbestos litigation cases:⁶ (1) the California Supreme Court’s “exposure-to-risk” test of Rutherford v. Owens-Illinois, Inc., 941 P.2d 1203, 1206 (Cal. 1997); (2) the Texas Supreme Court’s “defendant-specific-dosage-plus-

⁶The three approaches discussed in this opinion are not exhaustive. Other jurisdictions have adopted modified standards. See, e.g., Ingram v. ACandS, Inc., 977 F.2d 1332, 1344 (9th Cir. 1992) (adopting a standard that requires the asbestos product to play “a role in the occurrence of the plaintiff’s injuries”); In re Hawaii Federal Asbestos Cases, 960 F.2d 806, 818 (9th Cir. 1992) (employing the “inference of exposure” test); Blackston v. Shook & Fletcher Insulation Co., 764 F.2d 1480, 1481 (11th Cir. 1985) (“requir[ing] the plaintiff to show that he was exposed to [a] defendant’s asbestos-containing product by working with or in close proximity to the product”). We believe, however, that the three approaches discussed are the most widely recognized causation standards in asbestos cases.

substantial-factor” test in Borg-Warner Corp. v. Flores, 232 S.W.3d 765, 773 (Tex. 2007); and (3) the Fourth Circuit’s “frequency, regularity, proximity” test set forth in Lohrmann v. Pittsburgh Corning Corp., 782 F.2d 1156, 1163 (4th Cir. 1986).

Appellants urge this court to adopt the causation standard for asbestos cases pioneered by the California Supreme Court in Rutherford. Conversely, Kelly-Moore, Kaiser Gypsum, and Georgia Pacific request that this court adopt the Fourth Circuit’s Lohrmann standard. Union Carbide does not advocate for a specific test, but relies primarily on Rutherford and its progeny in responding to appellants’ arguments. We discuss each standard in turn.

Rutherford, Flores, and Lohrmann

In Rutherford, a lung cancer case, the California Supreme Court held that “plaintiffs may prove causation in asbestos-related cancer cases by demonstrating that the plaintiff’s [or decedent’s] exposure to defendant’s asbestos-containing product in reasonable medical probability was a substantial factor in contributing to the aggregate dose of asbestos the plaintiff or decedent inhaled or ingested, and hence to the risk of developing asbestos-related cancer.” 941 P.2d at 1219 (first emphasis added) (footnote omitted). While the court did not reduce “substantial factor” to a formulaic calculation,⁷ id. at 1214 (“The term ‘substantial factor’ has not been judicially defined with specificity, and indeed it has been observed that it is neither possible nor desirable to reduce it to any lower terms.” (internal quotations omitted)), the court held that the

⁷The Rutherford court did not “endorse any one particular standard for establishing the requisite exposure to a defendant’s asbestos products.” 941 P.2d at 1223 n.12 (emphasis omitted).

plaintiff need not demonstrate that “fibers from the defendant’s particular product were the ones, or among the ones, that actually produced the [asbestos-related disease].” Id. at 1219 (emphasis omitted). Further, the court recognized that “[t]he substantial factor standard is a relatively broad one, requiring only that the contribution of the individual cause be more than negligible or theoretical.” Id. at 1220.

The Rutherford test “treat[s] every non-negligible exposure to risk as a factual cause.” Jane Stapleton, The Two Explosive Proof-of-Causation Doctrines Central to Asbestos Claims, 74 *Brook. L. Rev.* 1011, 1029 (2009). One legal commentator noted that, in Rutherford, the California Supreme Court departed from traditional tort principles by adopting a “radical” approach to risk exposure and “proceeding on the idea (a fiction) that every asbestos fiber was involved in the cancer mechanism.” Id. We agree with these concerns and conclude that this test does not strike the proper balance, as its extraordinarily relaxed nature does not afford enough protection for manufacturers that may not have caused the resulting disease.

The Texas Supreme Court has also embraced a “substantial factor” test, but has applied the test more strictly than the California Supreme Court decision suggests is necessary. Borg-Warner Corp. v. Flores, 232 S.W.3d 765, 773 (Tex. 2007). In Flores, the plaintiff mechanic sued a brake-pad manufacturer, alleging that he suffered from asbestosis caused by working with the manufacturer’s brake product “on five to seven of the roughly twenty brake jobs he performed each week” for three of the nearly 40 years that he worked with brakes. Id. at 766. A doctor testified that the plaintiff could have been exposed to “some’ respirable fibers” during his years of brake work. Id. at 774. The jury found that the

plaintiff sustained an asbestos-related disease and that the brake-pad manufacturer's negligence proximately caused that disease. Id. at 768.

After the court of appeals affirmed the judgment in favor of the plaintiff, the Texas Supreme Court, recognizing the proof difficulties accompanying asbestos claims, turned to California's Rutherford decision in establishing a suitable test. Id. at 772-73. The court acknowledged that plaintiffs cannot be expected to prove unknown details of a given asbestos fiber. Id. (citing Rutherford, 941 P.2d at 1219). Nonetheless, the court believed that merely showing regular exposure to "some" unspecified quantity of asbestos "is necessary but not sufficient, as it provides none of the quantitative information necessary to support causation under Texas law." Id. at 772. Thus, the court relied in part on the Rutherford test in requiring the plaintiff to present not only evidence of regular exposure but also "[d]efendant-specific evidence relating to the approximate dose to which the plaintiff was exposed, coupled with evidence that the dose was a substantial factor in causing the asbestos-related disease." Id. at 773. In thereby recognizing that asbestosis is a dose-related disease, the Texas Supreme Court reversed the judgment, holding that the plaintiff failed to present sufficient evidence of causation concerning the plaintiff's exposure to asbestos in the manufacturer's product, including the extent and intensity of the plaintiff's exposure to disease-causing asbestos fibers, such as "the approximate quantum of fibers to which [he] was exposed." Id. at 774; see id. at 771-74.⁸

⁸Although the Texas Supreme Court looked to Rutherford, it is not clear that it agreed with the California court's designation of the substantial factor standard as "broad" when determining causation in
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We conclude that in protecting the manufacturer, the Flores causation test swings too far beyond Rutherford to the point where it overburdens the claimant, who might not be able to sufficiently demonstrate not only the dosage quantity of exposure to a particular defendant's product but also the total asbestos dosage to which he was exposed. We conclude that the Flores application of the "substantial factor" test is too stringent. Id. at 773.

Instead, we are persuaded by the Lohrmann v. Pittsburgh Corning Corp., 782 F.2d 1156 (4th Cir. 1986), "frequency, regularity, proximity" test, as applied in mesothelioma cases. See Gregg v. V-J Auto Parts, Inc., 943 A.2d 216, 217 (Pa. 2007). "The majority of the federal circuits and state courts addressing this question have chosen to apply the Lohrmann test to determine whether the plaintiff has satisfied his burden of showing that a specific defendant's products caused his disease." Charles T. Greene, Determining Liability in Asbestos Cases: The Battle to Assign Liability Decades After Exposure, 31 Am. J. Trial Advoc. 571, 572 (2008); see Slaughter v. Southern Talc. Co., 949 F.2d 167, 171 n.3 (5th Cir. 1991) (most federal circuit courts and state courts, including "Michigan, Massachusetts, New Jersey, Illinois, Pennsylvania, Maryland, Nebraska, and Oklahoma have adopted the test"); see, e.g., Chism v. W.R. Grace & Co., 158 F.3d 988, 992 (8th Cir. 1998); Shetterly v. Raymark Industries, Inc., 117 F.3d 776, 780 (4th Cir. 1997); Dillon v. Fibreboard Corp., 919 F.2d 1488, 1491-92 (10th Cir. 1990); Robertson v. Allied Signal, Inc., 914

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asbestos cases. See 3 David L. Faigman, et al., Modern Scientific Evidence: The Law and Science of Expert Testimony § 26:5 (2011).

F.2d 360, 380 (3d Cir. 1990); Hyde v. Owens-Corning Fiberglas Corp., 751 F. Supp. 832, 833 (D. Ariz. 1990); Chavers v. General Motors Corp., 79 S.W.3d 361, 367 (Ark. 2002); Gorman-Rupp Co. v. Hall, 908 So. 2d 749, 757 (Miss. 2005). The Lohrmann causation standard has also been adopted by statute in Florida, Georgia, and Ohio. See David E. Bernstein, Getting to Causation in Toxic Tort Cases, 74 Brook. L. Rev. 51, 55-56 n.16 (2008).

The plaintiff in Lohrmann was a pipefitter at a shipyard in Baltimore, Maryland, for nearly 40 years. 782 F.2d at 1158. He brought suit in negligence and strict liability against 19 defendants, alleging that he had asbestosis resulting from exposure to defendants' asbestos-containing products during his employment. Id. At the conclusion of trial, the district court granted a directed verdict in favor of three of the defendants, finding that "there was insufficient evidence to show the necessary element of causation between use of [the defendants'] products and [the plaintiff's] claim of asbestosis." Id. at 1161-62. The plaintiff appealed.

In crafting a causation standard, the Fourth Circuit "attempt[ed] to reduce the evidentiary burden on plaintiffs while still absolving defendants who were not responsible for plaintiffs' injuries." Bernstein, supra, at 56; see also Sholtis v. American Cyanamid Co., 568 A.2d 1196, 1207 (N.J. Super. Ct. App. Div. 1989) (stating that the Lohrmann test "is a fair balance between the needs of plaintiffs (recognizing the difficulty of proving contact) and defendants (protecting against liability predicated on guesswork)"). The court held that when a plaintiff alleges multiple sources of exposure to asbestos, the plaintiff is required to prove exposure to a "specific product" attributable to the

defendant, “on a regular basis over some extended period of time” and “in proximity to where the plaintiff actually worked,” such that it is probable, or reasonable to infer, that the exposure to the defendant’s products caused plaintiff’s injuries. Lohrmann, 782 F.2d at 1162-63; see Chavers, 79 S.W.3d at 369 (adopting the “frequency, regularity, proximity” test in a mesothelioma case). The court provided that “this is a de minimis rule since a plaintiff must prove more than a casual or minimum contact with the product.” Lohrmann, 782 F.2d at 1162. In addition, the court noted that “[t]his is a reasonable rule when one considers the Maryland law of substantial causation and the unusual nature of the asbestosis disease process, which can take years of exposure to produce the disease.” Id. Furthermore, the court stated, “mere proof that the plaintiff and a certain asbestos product are at the shipyard at the same time, without more, does not prove exposure to that product.” Id.

In affirming the district court’s directed verdict, the Fourth Circuit held that the plaintiff did not present evidence to show sufficient contact with the defendants’ products and failed to raise a permissible inference that exposure to the defendants’ products was a substantial factor in the development of his asbestosis. Id. at 1163-64. There was testimony and evidence presented showing that asbestos-containing products—namely, cloth and pipe covering—were used at the shipyard on an almost daily basis. Id. at 1163. As to two of the directed verdict defendants, the plaintiff failed to demonstrate any exposure to their products. Id. at 1163-64. With regard to the other defendant, the plaintiff testified he was exposed to an asbestos-containing pipe covering on ten to fifteen occasions of between one and eight hours’ duration during the term of his employment, but the court concluded that this exposure was

insufficient to infer that it was a substantial factor in causing his asbestosis. Id. at 1163.

The Lohrmann test has also been applied in mesothelioma cases. In Gregg v. V-J Auto Parts, Inc., 943 A.2d 216, 225 (Pa. 2007), the Pennsylvania Supreme Court, citing Tragarz v. Keene Corp., 980 F.2d 411, 420 (7th Cir. 1992), explained that the Lohrmann test provides helpful evaluative guidance in distinguishing cases in which the plaintiff can demonstrate that the defendant's product likely caused his injury from those in which he cannot so show due to minimal exposure to the defendant's product, but it is not "a rigid standard with an absolute threshold necessary to support liability." The Pennsylvania court recognized that the Lohrmann factors should be "tailored to the facts and circumstances of the case." Gregg, 943 A.2d at 225. Noting that the plaintiff's expert had explained that, unlike asbestosis, mesothelioma can result from low doses of asbestos,⁹ the court reasoned that "the frequency and regularity prongs become somewhat less cumbersome" in such cases. Id. (internal quotations omitted). In conclusion, the Pennsylvania Supreme Court held that, at the summary judgment phase, courts must

⁹It appears generally accepted that asbestosis typically results from long-term, high-level exposure to asbestos or relatively brief exposure to extremely high levels of asbestos. See CSX Transp., Inc. v. Hensley, 556 U.S. 838, 839 (2009); Continental Cas. Co. v. Employers Ins. Co., 871 N.Y.S.2d 48, 61 (App. Div. 2008); Borg-Warner Corp. v. Flores, 232 S.W.3d 765, 771 (Tex. 2007); Zimko v. American Cyanamid, 905 So. 2d 465, 484 n.21 (La. Ct. App. 2005). On the other hand, as appellants' expert testified in this case, mesothelioma is a signature asbestos disease that can be contracted from low doses of asbestos exposure. See Flores, 232 S.W.3d at 771; Zimko, 905 So. 2d at 484 n.21; In re Asbestos Products Liability Litigation, No. MDL-875, 2012 WL 760739, at *5 (E.D. Pa. Feb. 17, 2012).

“make a reasoned assessment concerning whether, in light of the evidence concerning frequency, regularity, and proximity of a plaintiff’s/decedent’s asserted exposure, a jury would be entitled to make the necessary inference of a sufficient causal connection between the defendant’s product and the asserted injury.” Id. at 227.

Because this test balances the rights and interests of the manufacturers with those of the claimants, we conclude that it is the appropriate test for use in this state. Like Maryland, Nevada relies on the substantial factor test of the Restatement (Second) of Torts § 431 to determine legal causation, otherwise known as proximate causation. See Lohrmann, 782 F.2d at 1162; County of Clark v. Upchurch, 114 Nev. 749, 759, 961 P.2d 754, 760-61 (1998); see also Wyeth v. Rowatt, 126 Nev. ___, ___, 244 P.3d 765, 778 (2010) (stating that “substantial-factor causation . . . is appropriate when ‘an injury may have had two causes, either of which, operating alone, would have been sufficient to cause the injury’” (quoting Johnson v. Egtegar, 112 Nev. 428, 435, 915 P.2d 271, 276 (1996))). Accordingly, we adopt the Lohrmann test, as explained in Gregg, for use in determining whether a defendant’s product was a substantial factor in causing the plaintiff’s mesothelioma.

Sufficiency of the evidence relating to Holcomb’s mesothelioma

We next address whether, under the Lohrmann test, appellants submitted sufficient evidence to raise triable issues of fact on the issue of causation in response to the summary judgment motion in this case.

Where, as here, there is more than one supplier of the asbestos-containing products, the injured party must prove that exposure to the products made or sold by that particular defendant was a substantial factor in causing the injury. See County of Clark v. Upchurch,

114 Nev. 749, 759, 961 P.2d 754, 760-61 (1998); see also Wyeth, 126 Nev. at ___, 244 P.3d at 778. This fact-specific inquiry begins with the “interrelationship between the use of a defendant’s product at the workplace and the activities of the plaintiff at the workplace. This requires an understanding of the physical characteristics of the work place and of the relationship between the activities of the direct users of the product and the bystander plaintiff.” Georgia-Pacific v. Pransky, 800 A.2d 722, 725 (Md. 2002) (quoting Eagle-Picher v. Balbos, 604 A.2d 445, 460 (Md. 1992)).

In addressing the overriding issue of whether appellants adequately established sufficient exposure to each of the respondents’ asbestos-containing products such that the exposure was a substantial factor in Holcomb contracting mesothelioma, we first address the standard for finding that a respondent’s product caused Holcomb’s mesothelioma.¹⁰ In this case, neither party takes the position that some jurisdictions take that “any” or “each and every” exposure, even if it is just one strand of asbestos, is a substantial factor in causing mesothelioma. See John Crane, Inc. v. Wommack, 489 S.E.2d 527, 531 (Ga. Ct. App. 1997) (“Expert testimony showed that it is universally agreed that asbestos fibers are intrinsically dangerous and that the respiration of each fiber is cumulatively harmful.”); McAskill v. American Marine Holding Co., 9 So. 3d 264, 268 (La. Ct. App. 2009) (acknowledging that “[m]edical science has proven a causal relationship between asbestos exposure and mesothelioma

¹⁰While the parties agree that medical causation is not at issue in this case, it is necessarily intertwined with the determination of whether any of the exposures were a substantial factor in the contraction of the disease.

above background levels,” that “brief exposures to asbestos have caused mesothelioma,” and that “every non-trivial exposure to asbestos contributes to and constitutes a cause of mesothelioma”); Held v. Avondale Industries, Inc., 672 So. 2d 1106, 1109 (La. Ct. App. 1996) (medical evidence showed that even slight exposure to asbestos is a significant contributing cause of mesothelioma). In fact, the courts that adopt the three-factor test of frequency, regularity, and proximity regularly reject the “any” exposure argument. See, e.g., Lohrmann v. Pittsburgh Corning Corp., 782 F.2d 1156, 1162 (4th Cir. 1986) (rejecting the “any” rule as being contrary to Maryland’s substantial causation law); Gregg v. V-J Auto Parts, Inc., 943 A.2d 216, 226-27 (Pa. 2007) (“[W]e do not believe that it is a viable solution to indulge in a fiction that each and every exposure to asbestos, no matter how minimal in relation to other exposures, implicates a fact issue concerning substantial-factor causation in every ‘direct-evidence’ case.”). Thus, more than any exposure must be shown.

The medical testimony presented by appellants was undisputed. Appellants established that cumulative exposures to asbestos above the background level in ambient air increase the total exposure, and cumulative exposure increases the risk of developing mesothelioma. Because of this, and the fact that each exposure shortens the average latency period for the appearance of mesothelioma, the testimony provided that all significant exposures contribute to the causation of mesothelioma. Thus, de minimis exposures are insufficient to prove that the exposure was a substantial factor in causing mesothelioma.

To defeat summary judgment and bring the issue of exposure to a jury, a plaintiff is required to show more than speculation or possibility that the product caused the injury. See Tragarz v. Keene Corp.,

980 F.2d 411, 418-23 (7th Cir. 1992). For a case to move past the summary judgment phase to a jury, the plaintiff must demonstrate “an inference of probability,” meaning that “the plaintiff must put forth evidence that supports an inference of probable exposure to the defendant’s asbestos product.” Id. at 418. Appellants must provide evidence of Holcomb’s exposure to each of respondents’ products in order to justify a reasonable inference that the product was a substantial factor in causing his mesothelioma. Once some evidence of frequent, proximate, and regular exposure to a respondent’s product is produced, it is for the jury to determine whether the exposure is sufficient to meet the frequency, proximity, and regularity prongs. See id. at 418-23.

Holcomb’s testimony and other evidence

Appellants argue that they demonstrated triable issues of fact regarding whether Holcomb was exposed regularly and frequently to asbestos in respondents’ products. They assert that this was shown by Holcomb’s deposition testimony that he inhaled dust from the joint-compound products manufactured by respondents during his years of construction work in Florida and Nevada between 1969 and 1976. Appellants also argue that once they demonstrated evidence of Holcomb’s more-than-minimal exposure to respondents’ products, the specificity of his testimony—whether Holcomb recalled specific jobsites, purchased the products himself, or remembered specific logos or lettering—are issues that go merely to the weight of his testimony and thus are appropriate for consideration by the trier of fact, not by the court on a summary judgment motion.

Respondents assert that, when compared to his testimony regarding his work with brake products, Holcomb’s generalized and vague testimony regarding occasional work with joint-compound products failed

to demonstrate a reasonable inference that those products, and the specific product of any individual manufacturer, caused his mesothelioma. They point out that Holcomb could not identify any particular Kaiser Gypsum or Georgia Pacific product that he used; could not describe the products' labels, packaging, or markings; and could not recall how often during his work in construction that he used any particular product. Respondents contend that Holcomb could not identify whether the products that he used actually contained asbestos. Except with respect to Union Carbide, we disagree that summary judgment was warranted on this basis.

Holcomb's testimony regarding Kelly-Moore, Kaiser Gypsum, and Georgia Pacific products

Holcomb testified that he used Kelly-Moore, Kaiser Gypsum, and Georgia Pacific products on numerous occasions and in several locations over an approximately seven-year period, interrupted only by a short stint in the military. While he could not identify the particular packaging, logos, or names of some of the products, and he could not identify specific locations and jobs on which he used the products 40 years ago, that level of identification is not required. Ultimately, his testimony and other evidence provide the basis for a reasonable inference that Holcomb's mesothelioma was caused by exposure to each of the respondents' products.

Preliminarily, Holcomb presented evidence that asbestos-containing joint compounds, when used in the ordinary and customary ways, regularly gave rise to significant amounts of asbestos in the air. Thus, the joint-compound user and those around him directly breathed in the asbestos-laden dust. Because Holcomb testified to using these products in ways that caused him to inhale asbestos contained therein, the proximity prong is met with regard to each instance of exposure.

Kelly-Moore

Holcomb presented evidence that he used Kelly-Moore's Paco joint-compound brand, including Paco Quik-Set, in Florida and Las Vegas. Respondents can point to no undisputed evidence that Paco products were not available in Florida or Las Vegas during the relevant time. All of Kelly-Moore's Paco joint compounds contained asbestos through 1976 or 1978; thus any failure to identify a particular Paco product is not dispositive. While respondents point out that one or even a few exposures is not enough, Holcomb stated that he used Kelly-Moore's Paco products numerous times throughout the period. This is more than a minimal amount and, when considered with Holcomb's asserted direct exposure to asbestos in the product, may amount to regular and proximate exposure over an extended period sufficient to cause mesothelioma. Accordingly, a jury could reasonably infer that Kelly-Moore's Paco products were a substantial factor in the development of Holcomb's cancer.

Kaiser Gypsum

When viewed in the light most favorable to Holcomb, the evidence of Holcomb's exposure to Kaiser Gypsum's products supports a finding that those products were a substantial factor in causing Holcomb's mesothelioma. This evidence was legally sufficient to permit a jury to infer proximate cause. Holcomb testified that he was accustomed to using Kaiser Gypsum's products throughout his years in both Florida and Las Vegas. Holcomb testified that he used Kaiser Gypsum's products "on several jobs, lots and lots." While Holcomb could identify only the manufacturer, Kaiser Gypsum, and not any of Kaiser Gypsum's drywall products, most of Holcomb's alleged use of Kaiser Gypsum products predated Kaiser Gypsum's introduction of a non-asbestos formula in 1974. Thus, any Kaiser Gypsum products that Holcomb used prior to 1974

necessarily contained asbestos. Holcomb only needed to show sufficient evidence of probable exposure, and he remembered seeing the Kaiser Gypsum brand name on the labels. Putting this into context with the medical evidence that minimal dosages of asbestos can contribute to mesothelioma and the more relaxed nature of the test in mesothelioma cases, Gregg, 943 A.2d at 225, we conclude that Holcomb has presented sufficient evidence to defeat summary judgment against Kaiser Gypsum. Accordingly, the district court should not have granted summary judgment, as issues of material fact remain for the jury to resolve.

Georgia Pacific

Holcomb testified that he used Georgia Pacific brand joint-compound products on countless jobsites in Florida and Las Vegas and was “accustomed to using” Georgia Pacific products. Holcomb recalled seeing the Georgia Pacific name on bags, recalled using Georgia Pacific products “a lot,” “many times,” and remembered using Georgia Pacific products when working at the motel. Holcomb identified the Georgia Pacific brand joint compound as one he often used between 1969 and 1973 in Florida and 1975 and 1978 in Las Vegas. All Georgia Pacific joint compound contained asbestos from 1956 to 1974. Georgia Pacific began making non-asbestos joint compound in 1972 or 1973. Though Holcomb could not state whether the Georgia Pacific joint compound he used while in Las Vegas contained asbestos, he sufficiently raised issues of material fact concerning his use of Georgia Pacific joint compound from 1969 to 1974. Because Holcomb was only required to show “an inference of probable exposure to the defendant’s asbestos product,” Tragarz v. Keene Corp., 980 F.2d 411, 418 (7th Cir. 1992), we conclude that Holcomb met this minimal burden.

Union Carbide

Holcomb established that the Kelly-Moore, Kaiser Gypsum, and Georgia Pacific products he may have regularly and frequently used contained asbestos, and therefore summary judgment was not appropriate as to those defendants. Summary judgment was warranted, however, as to Union Carbide. Appellants argue that given the thousands of tons of asbestos that Union Carbide supplied to these three manufacturers in the pertinent time frame, triable issues of fact exist regarding the presence of Union Carbide fibers in the joint compounds used by Holcomb. Union Carbide contends that summary judgment was appropriate because appellants did not carry their burden to show that Union Carbide asbestos was actually in any product allegedly used by Holcomb.¹¹

We agree with Union Carbide. Deposition testimony supports that Kelly-Moore, Kaiser Gypsum, and Georgia Pacific used numerous suppliers of asbestos.¹² Without knowing the specific products that

¹¹On appeal, Union Carbide abandons its argument that it was entitled to a sophisticated-user defense. It instead argues, for the first time on appeal, that it is entitled to a bulk supplier defense, as it was a seller of raw materials to third-party manufacturers whom it warned. Additionally, the district court did not rule on appellants' claims against Union Carbide for false representation or intentional failure to warn, and those claims are not appealed here. Because we conclude that summary judgment was properly granted in Union Carbide's favor, these issues are rendered moot by the resolution of this appeal.

¹²Respondents challenge the use of interrogatory evidence from other cases on the grounds that the evidence was not properly disclosed and the cases are separate and unrelated. However, as the use of this evidence is unnecessary to the resolution of this appeal, this contention will not be discussed further. Further, any argument concerning the use of depositions raised in the reply brief will not be considered by this court.

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Holcomb used at a particular time, appellants cannot show that Union Carbide's asbestos was in the products used by Holcomb.¹³ Appellants, who bear the burden of showing that there is an issue of material fact, have provided no admissible evidence in this regard. See School Dist. No. 1J v. ACandS Inc., 767 F. Supp. 1051, 1056 (D. Or. 1991) (granting summary judgment for the defendant where plaintiff identified an asbestos-containing product manufactured by the defendant and one other company because there was no evidence that it was the defendant's products that were installed and not the products of the other manufacturer); Estate of Henderson v. W.R. Grace Co., 541 N.E.2d 805, 808 (Ill. App. Ct. 1989) (affirming summary judgment for the defendant, despite evidence that plaintiff was exposed either to the defendant's product or an approved equal, because the evidence failed to show whether the defendant's product, as opposed to an approved equal, was actually

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City of Elko v. Zillich, 100 Nev. 366, 371, 683 P.2d 5, 8 (1984) (a party may not raise a new issue for the first time in a reply brief).

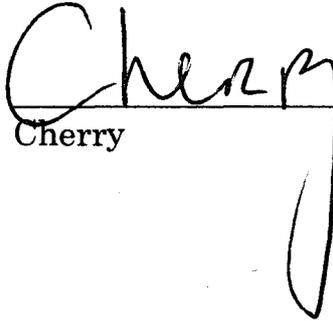
¹³Appellants cite Betsinger v. D.R. Horton, Inc., 126 Nev. ___, ___, 232 P.3d 433, 435 (2010), to support their argument that they are not legally required to demonstrate that Union Carbide was the exclusive fiber supplier, as they are only held to the standard that it was more likely than not. Even if this were the standard and if appellants could use all of the contested evidence, they still have not shown that Union Carbide was a main supplier. See Lineaweaver v. Plant Insulation Co., 37 Cal. Rptr. 2d 902, 907-08 (Ct. App. 1995) (recognizing that "the probability that any one defendant is responsible for plaintiff's injury decreases with an increase in the number of possible tortfeasors" and that "the wrongdoer who caused the harm . . . should bear the cost, and it serves no justice to fashion rules which allow responsible parties to escape liability while demanding others to compensate a loss they did not create").

used at the plaintiff's job site); Samarin v. GAF Corp., 571 A.2d 398, 406 (Pa. Super. Ct. 1989) (affirming summary judgment when evidence showed that the plaintiff was exposed to an asbestos cloth, but the plaintiff could not identify the brand and there were multiple suppliers). As there is no triable issue of fact, the district court properly granted summary judgment in favor of Union Carbide, albeit on different grounds. See Nevada Power Co. v. Haggerty, 115 Nev. 353, 365 n.9, 989 P.2d 870, 877-78 n.9 (1999) (determining that when an issue is solely a question of law, this court may hear the issue in the interests of judicial economy if it chooses); Ford v. Showboat Operating Co., 110 Nev. 756, 755, 877 P.2d 546, 549 (1994) (this court will "affirm the order of the district court if it reached the correct result, albeit for different reasons." (quoting Rosenstein v. Steele, 103 Nev. 571, 575, 747 P.2d 230, 233 (1987))).

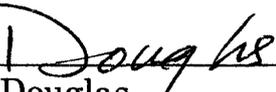
CONCLUSION

In order to ensure protection for both asbestos manufacturers and consumers injured by asbestos exposure, we adopt the test set forth in Lohrmann v. Pittsburgh Corning Corp., 782 F.2d 1156 (4th Cir. 1986), as used in cases where a plaintiff's mesothelioma is alleged to have been caused by exposure to products containing asbestos. See Gregg v. V-J Auto Parts, Inc., 943 A.2d 216, 225 (Pa. 2007). Based on the adoption and application of that test, we conclude that appellants raised inferences of probable exposure to Kelly-Moore, Kaiser Gypsum, and Georgia Pacific's products sufficient to defeat summary judgment as to those respondents, but not as to Union Carbide. Therefore, we affirm the grant of summary

judgment in Union Carbide's favor but conclude that the district court erred in granting summary judgment for the remaining respondents. We thus reverse the summary judgment in part and remand this matter for further proceedings.

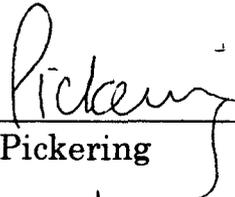
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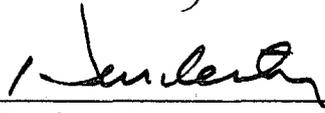
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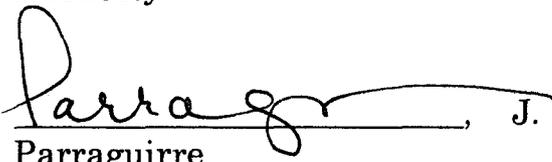
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Saitta

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Gibbons

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Pickering

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Hardesty

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